



**How-to Guide
SAP NetWeaver 2004s**

How To... prioritize XI messages on integration server

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**Applicable Releases:
SAP NetWeaver 2004s
Process Integration
Enabling Application-to-Application Processes**

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1 Scenario

The customer has a permanent workload on the XI Server with low priority EO, EOIO messages or acknowledgements. At unpredictable times important messages arrive which must or should be processed immediately. Usually these new arrived messages are assigned by random to the end of one of the available queues. The important message would be processed after all the other low priority messages in the queue.

The other way round is possible, too. You may define a filter for messages with low priority and assign them to a specific queue. There they are executed when free resources are available.

2 Introduction

With the help of the Queue Prioritization you can pick important messages and push them to queue XBT1 which is reserved for these selected messages.

Usually the messages are picked when they enter the XI Server in the inbound processing. You can use the Queue Prioritization also on:

- the XI Server Outbound processing
- a proxy sender application system
- a proxy receiver application system

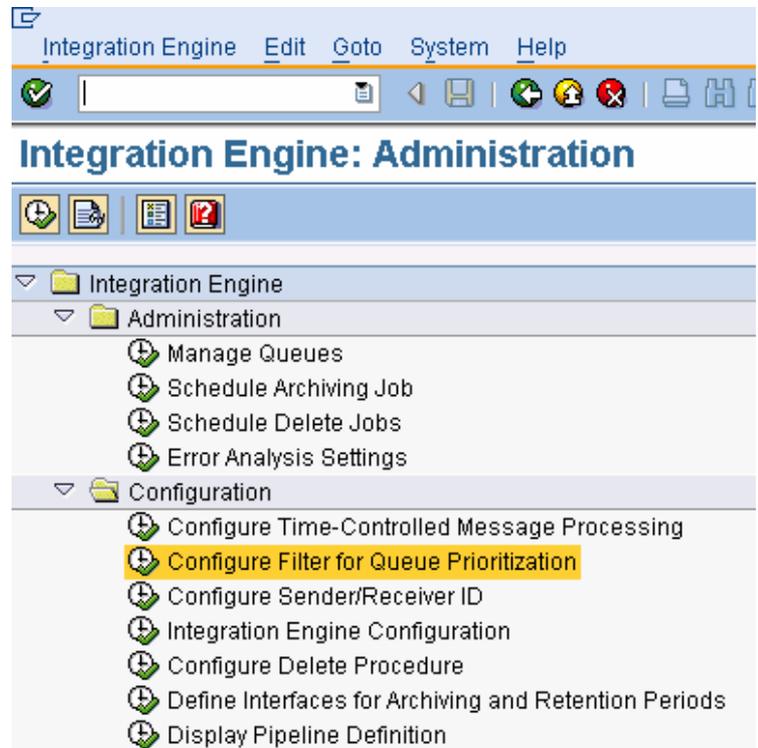
In the next chapter we will describe the possibilities on the XI Server for inbound and afterwards for outbound processing.

3 The Step By Step Solution

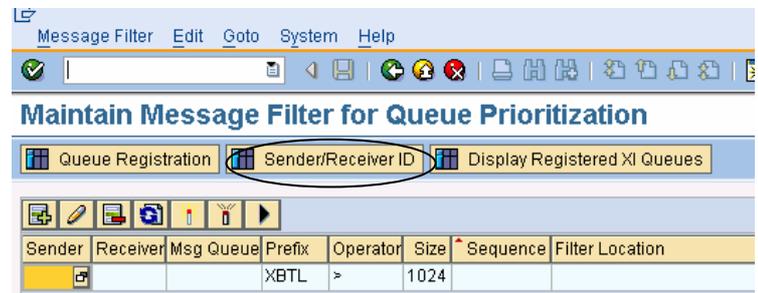
- First you define a filter to select the message.
- Secondly you test the filter
- Assign this filter to the message prioritization
- Activate the Filter
- Register the Queue

3.1 Inbound Queue

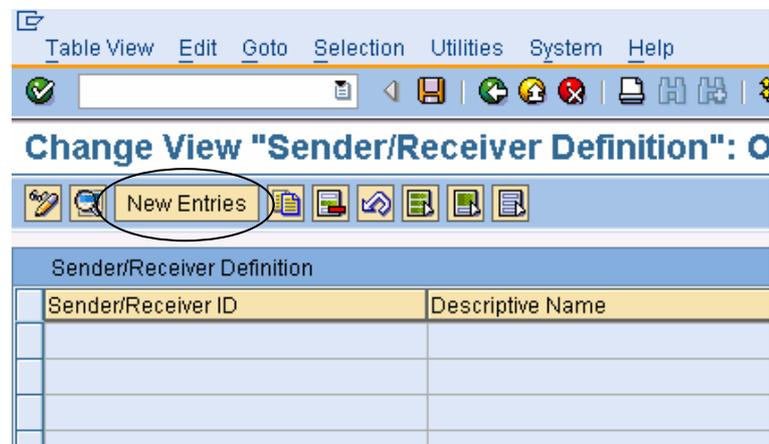
1. Logon to the Integration Server and navigate to the XI Administration. Choose: Configure Filter for Queue Prioritization



2. When you enter the transaction the first time you will find one entry for large messages. Via editing this line you define the size of a large message e.g. 1024 KB. To add a filter you create a Sender/Receiver ID or use an existing filter.



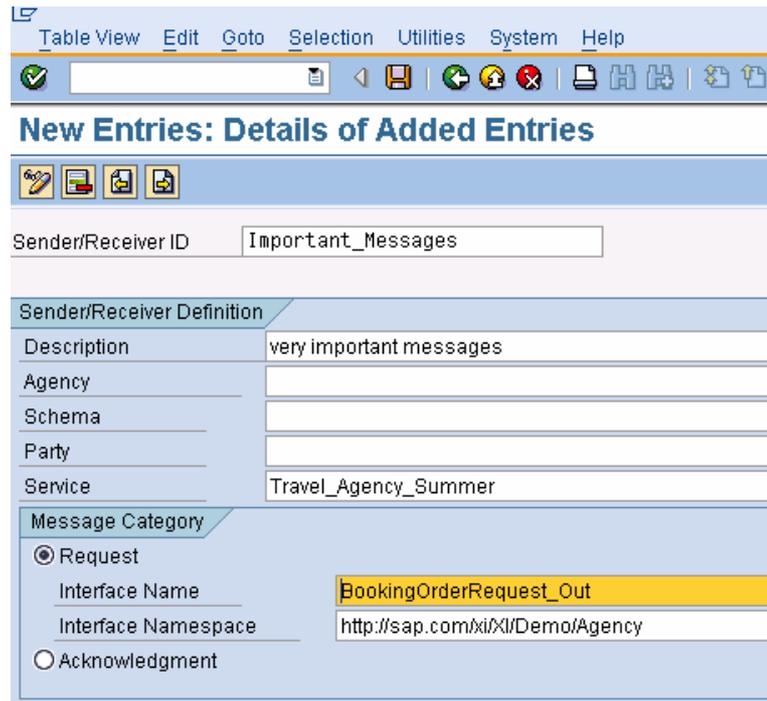
3. Change to the "Edit" mode and select "New Entries".



4.
 Type in a name for the Sender/Receiver ID e.g. "Important Messages"
 Give a description e.g. "very important messages"

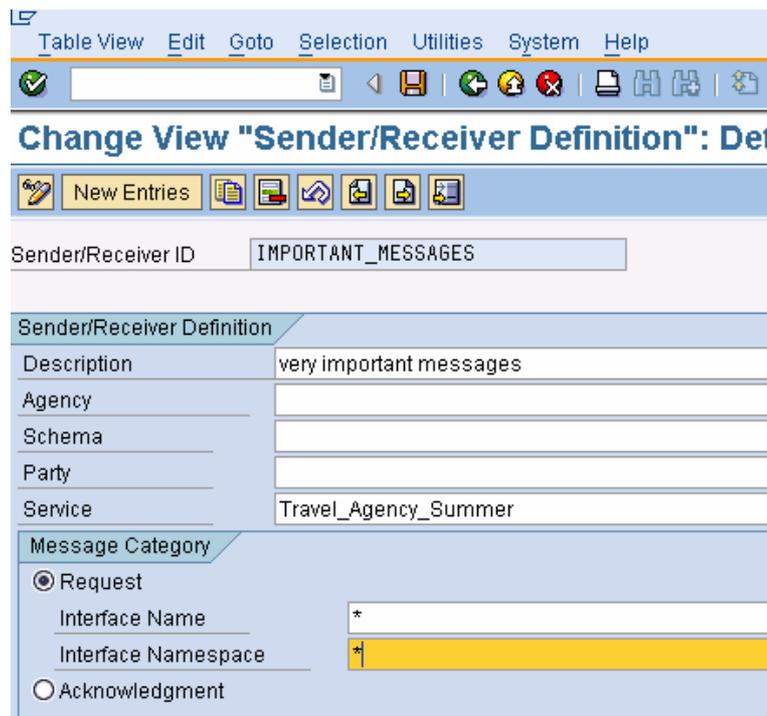
With the F4 help you select Service or Party, name a interface and namespace or use the wildcard "*".

In the message category you can select a request message or an acknowledgement.

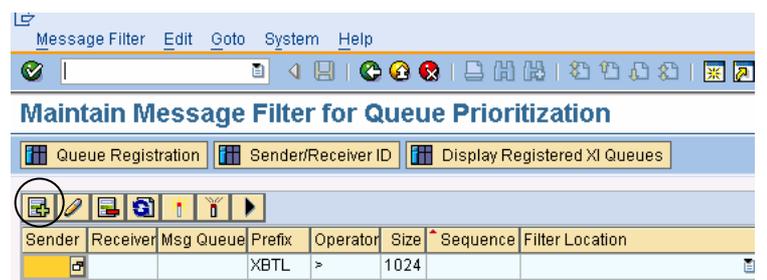


5.
 For the request message you may define Interface and namespace or choose all interfaces and/or namespaces using the wildcard "*".

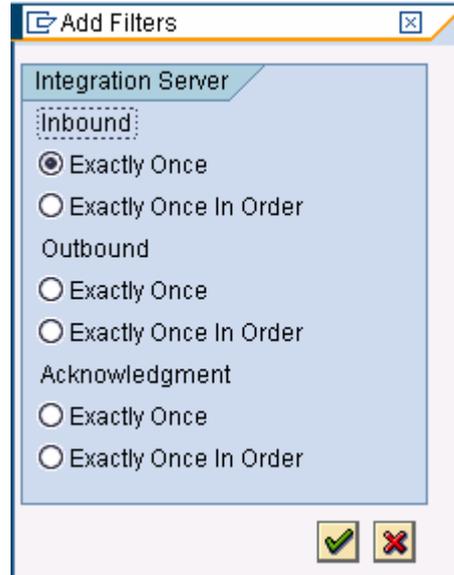
Save your entries and navigate back.



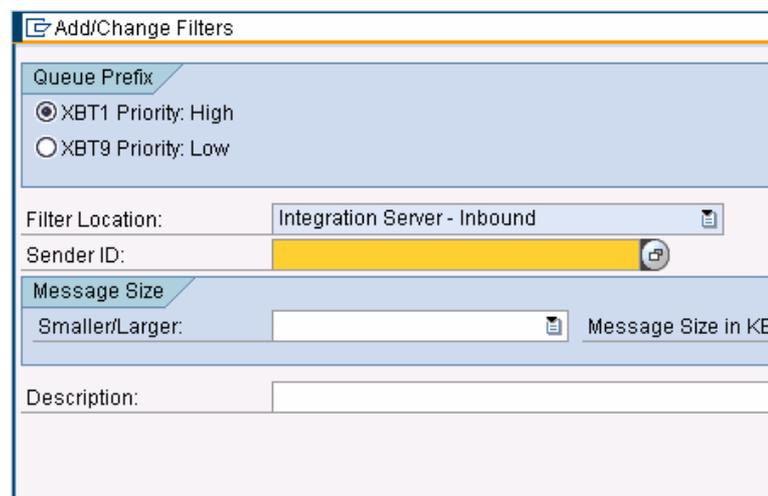
6.
 Select "+" to add a new filter.



7.
On the integration server you have the possibility to filter messages inbound, outbound or acknowledgements. In most cases you may select incoming EO messages.



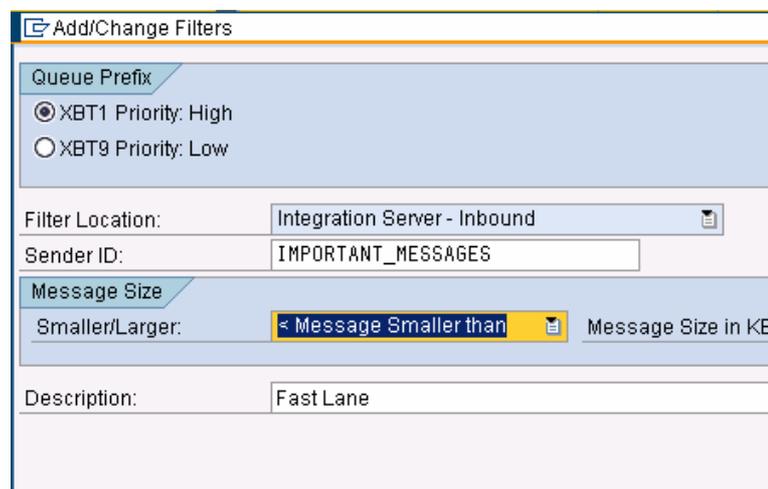
8.
You select the Sender ID using the F4 help.



9.
For example the "IMPORTANT_MESSAGES" from the filter definition in the step before.

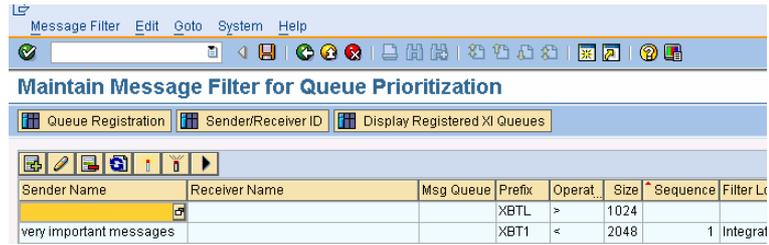


10.
To prioritize these messages select the XBT1 queue with high priority. You should define criteria for the size of a message.
Note: This makes a lot of sense to stop very big messages to enter the queue for important messages and maybe block it for a long time.

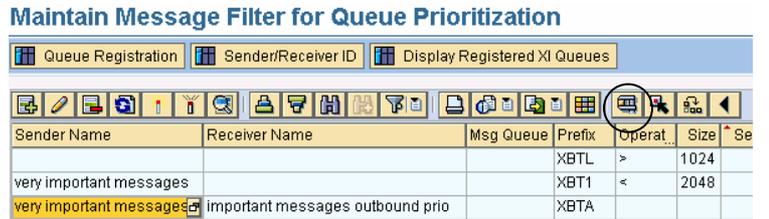


At the end you give a description.

11. Now the filter is added but not yet activated.

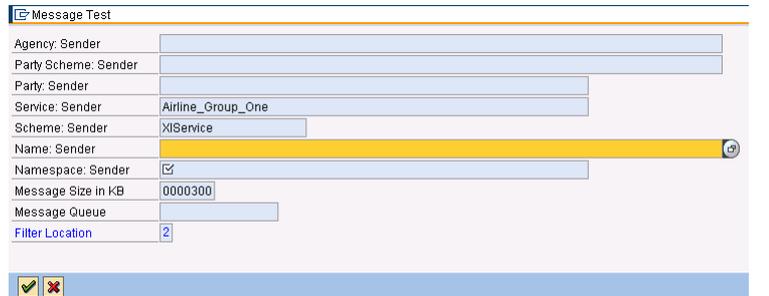


12. To check if and in which order the filters are working you should check with the testtool. Therefore expand the menu bar and select the testbutton.

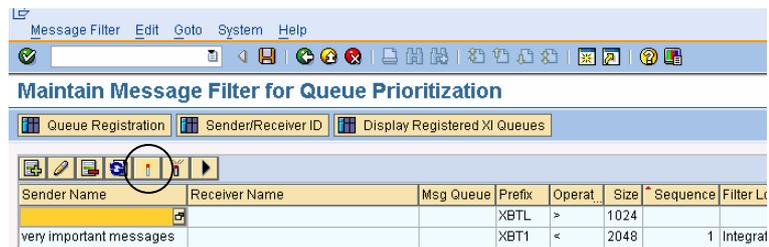


13. Enter the headerdata and messagesize to test the filter.

The result will show you if the filter works and in which sequence the message will be caught.

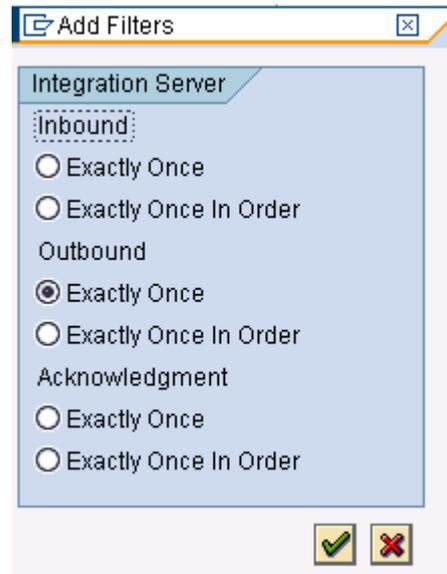


14. Push the button to activate.

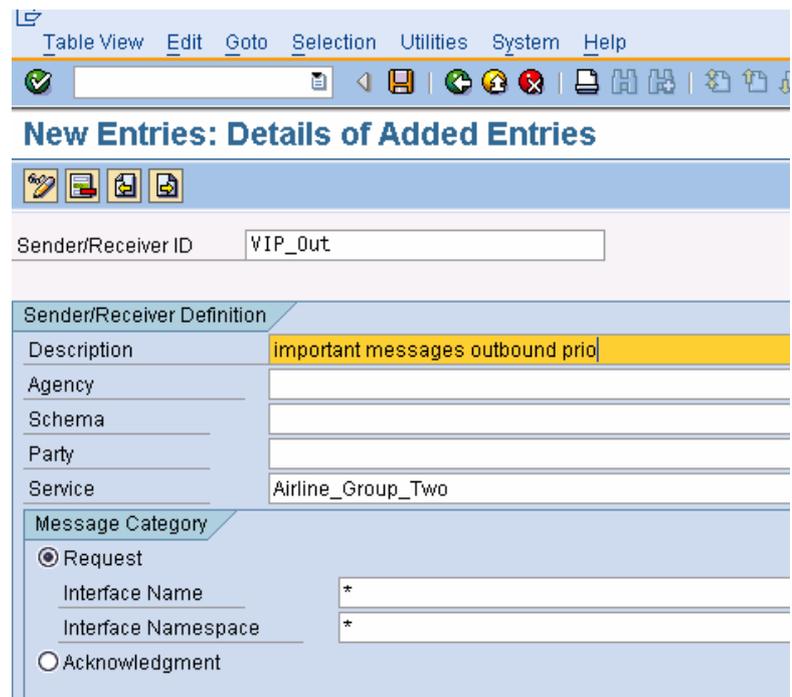


3.2 Outbound Queue

15. You start like in the inboundqueue with defining a filter. This time you select “Outbound”.



16. Give a description. Select Service or Party, name a interface and namespace or use the wildcard “*”.



17. Assign the filter for sender and receiver ID.

Optionally

18. The result will be added to the filter list and should be tested. To be effective it must be activated.

Sender Name	Receiver Name	M	Prefix	O	Size	S	Filter Location	Mes
			XBTL	>	1024			
very important messages	important messages		XBTA				Integration Server - Outbound	Req
very important messages			XBT1			1	Integration Server - Inbound	Req

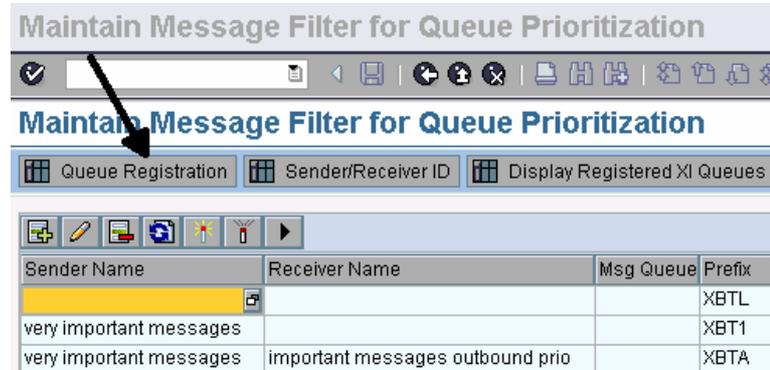
For large outbound messages there is a queue XBTM, too. Background: Messages may grow bigger during the mapping.

Via editing this line you define the size of a large message e.g. 10MB.

3.3 Queue Registration

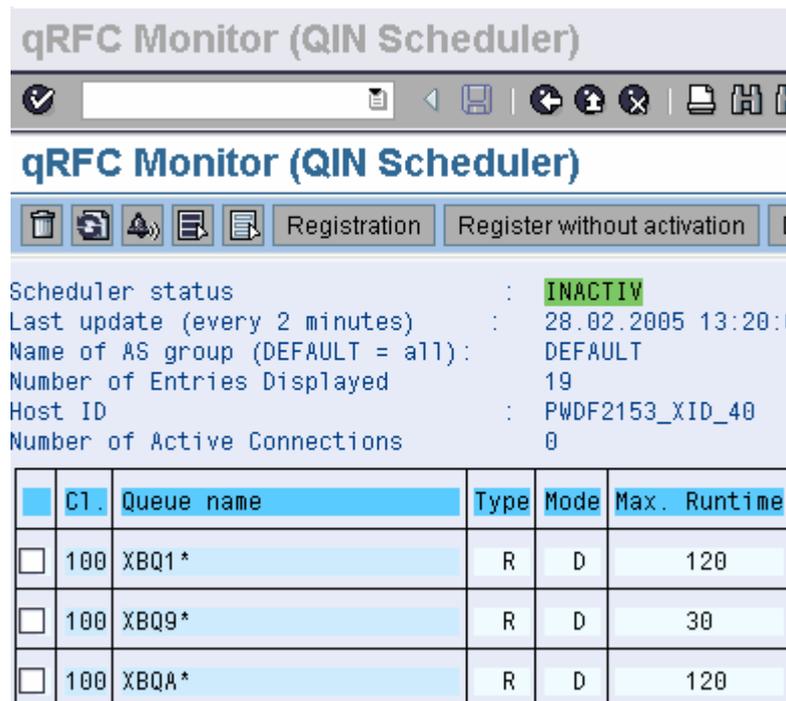
You must register the new queue in transaction SMQR.

19. Select "Queue Registration"

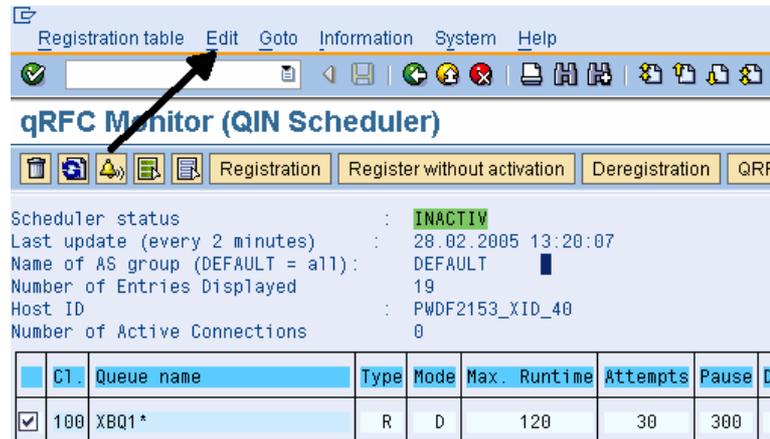


20. The qRFC Monitor opens. Check that your Queue has the type "R", means it is registered for processing.

Do not worry about the Scheduler status "Inactive", that means "nothing to do at this moment".

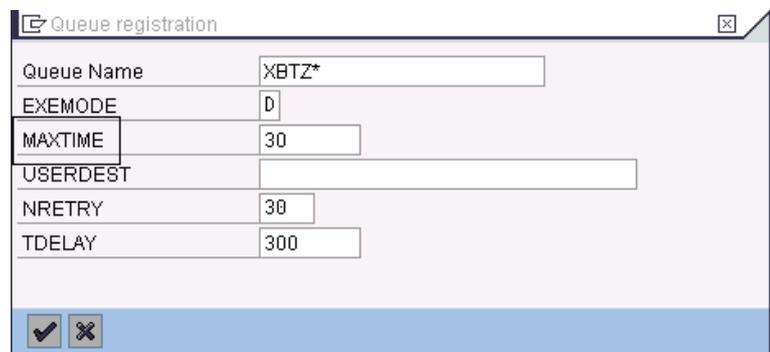


21. You find the properties of a queue when you mark the queue, choose "Edit" in the menu bar and select "Registration" (F6)



22. The MAXTIME parameter, which is read when the queue is registered, determines the time in seconds that is scheduled for processing the relevant queues. By varying these times, you can make the queues into queues for high, normal and low priority messages.

If you reserve 60 seconds for the XBTO* queues and 120 seconds for the XBTA* queues during periodic processing by the scheduler, this means that under continuous use, similar processing and comparable message sizes, the XBTA* queues should process approximately twice as many messages.



Note: In case the queue with these important messages stops, all selected messages will queue behind. We recommend strongly to monitor this queue.

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